

# PKC $\lambda/\iota$ (H-20): sc-32020

## BACKGROUND

Members of the protein kinase C (PKC) family play a key regulatory role in a variety of cellular functions including cell growth and differentiation, gene expression, hormone secretion and membrane function. PKCs were originally identified as serine/threonine protein kinases whose activity was dependent on calcium and phospholipids. Diacylglycerols (DAG) and tumor promoting phorbol esters bind to and activate PKC. PKCs can be subdivided into many different isoforms ( $\alpha$ ,  $\beta$ I,  $\beta$ II,  $\gamma$ ,  $\delta$ ,  $\epsilon$ ,  $\zeta$ ,  $\eta$ ,  $\lambda$ ,  $\nu$ ,  $\mu$ ,  $\iota$ , and  $\theta$ ). Patterns of expression for each PKC isoform differ among tissues and PKC family members exhibit clear differences in their cofactor dependencies. For instance, the kinase activities of PKC  $\delta$  and  $\epsilon$  are independent of  $Ca^{2+}$ . On the other hand, most of the other PKC members possess phorbol ester-binding activities and kinase activities.

## CHROMOSOMAL LOCATION

Genetic locus: PRKCI (human) mapping to 3q26.2; Prkci (mouse) mapping to 3 A3.

## SOURCE

PKC  $\lambda/\iota$  (H-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PKC  $\lambda/\iota$  of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-32020 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

PKC  $\lambda/\iota$  (H-20) is recommended for detection of PKC  $\lambda/\iota$  of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PKC  $\lambda/\iota$  (H-20) is also recommended for detection of PKC  $\lambda/\iota$  in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PKC  $\lambda/\iota$  siRNA (h): sc-36257, PKC  $\lambda/\iota$  siRNA (m): sc-36258, PKC  $\lambda/\iota$  shRNA Plasmid (h): sc-36257-SH, PKC  $\lambda/\iota$  shRNA Plasmid (m): sc-36258-SH, PKC  $\lambda/\iota$  shRNA (h) Lentiviral Particles: sc-36257-V and PKC  $\lambda/\iota$  shRNA (m) Lentiviral Particles: sc-36258-V.

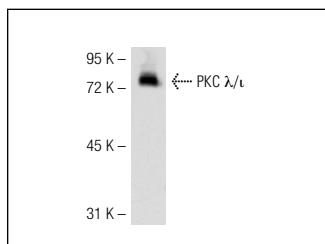
Molecular Weight of PKC  $\lambda/\iota$ : 68 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, MIA PaCa-2 cell lysate: sc-2285 or HeLa whole cell lysate: sc-2200.

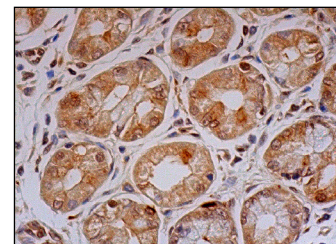
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



PKC  $\lambda/\iota$  (H-20): sc-32020. Western blot analysis of PKC  $\lambda/\iota$  expression in A-431 whole cell lysate.



PKC  $\lambda/\iota$  (H-20): sc-32020. Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic and nuclear staining of glandular cells.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

**MONOS**  
Satisfaction  
Guaranteed

Try **PKC  $\lambda/\iota$  (E-7): sc-376344** or **PKC (A-3): sc-17769**, our highly recommended monoclonal alternatives to PKC  $\lambda/\iota$  (H-20).